Select Committee on Economic Affairs

Uncorrected oral evidence: Annual session with the Governor of the Bank of England

Tuesday 5 March 2019

3.35 pm

Watch the meeting

Members present: Lord Forsyth of Drumlean (The Chairman); Baroness Bowles of Berkhamsted; Lord Burns; Lord Kerr of Kinlochard; Baroness Kingsmill; Lord Lamont of Lerwick; Lord Sharkey; Lord Tugendhat; Lord Turnbull.

Evidence Session No. 1 Heard in Public Questions 1 - 16

Witness

I: Dr Mark Carney, Governor, Bank of England.

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Examination of witness

Dr Mark Carney.

Q1  **The Chairman:** Governor, welcome to another meeting of the Economic Affairs Committee. We very much appreciate you taking time to come and share your views with us.

I begin by asking the first question, which is about the speech that you made on 12 February about the global outlook. You said: “In many respects, Brexit is the first test of the new global order, and it could prove the acid test of whether a way can be found to broaden the benefits of openness while enhancing democratic accountability. Brexit can lead to new forms of international co-operation and cross-border commerce built on a better balance of local and supranational authorities. In these respects, Brexit could affect both the short and long-term global outlooks”.

For the benefit of the Committee, could you expand on your thinking and what was in your mind when you made that remark?

**Dr Mark Carney:** Thank you very much for having me and for that question.

Let me start with the short term and then move on to the perhaps more interesting medium term. The context of the bulk of the speech was about the global outlook, as the title suggests. As you are no doubt aware, the global economy has been slowing over the last half of the year. It is a fairly broad-based slowdown, a shift from a situation a little more than a year ago where about 80% of the global economy was growing above trend and investment-led expansion in global trade was expanding, for the first time in a long time, at a rate faster than global growth. Virtually all those characteristics have now reversed. Less than a third of the globe is growing above trend, investment growth is quite modest and indeed is stagnant in some economies, and trade growth has slowed quite markedly as well.

The core question that the speech poses is: are we shifting from slowing to stagnating at a global level? The conclusion is probably not, based on a series of indicators relating to the business cycle and the financial cycle. However, there are two main caveats to that conclusion. The first relates to the situation in China and potential spillovers from that; I take note of the comments this morning by the Prime Minister of the People’s Republic about the revised growth forecast and the drivers behind that.

The second concerns questions about the nature of globalisation. It is well recognised that there are a series of quite consequential trade discussions under way. In fact, it does not really do justice to Brexit to call it merely a trade discussion, but it is the first and most substantial one, while the second is a comprehensive set of discussions with China. Both of those are material for the short-term global outlook. Which way Brexit goes in the coming weeks and months has the potential to provide a boost to the global economy but, alternatively, also the potential to
further slow the global economy. The same can be said of the current
discussions between the US and China, which by some reports are
coming to a head.

That is the shorter term. The bigger question is: what is driving these
tensions around globalisation, of which Brexit here and trade tensions
globally are two manifestations? I will get to how Brexit is an acid test,
but the argument is that the nature of globalisation creates fundamental
tensions. Any trade globalisation creates tensions in terms of inequalities;
there are winners and losers and there is a requirement for redistribution
or, at a minimum, reinvestment.

Tensions also build up as the world economy becomes more diversified
and emerging markets become more important, but we are still in a
position where the US dollar is as dominant in the global financial system
as it was at the time of the break-up of the Bretton Woods system in the
early 1970s. So a tension is created between the stance of US monetary
policy, global financial conditions and what is required for a series of
economies, particularly emerging economies. That is less so for the UK,
where we have more independent monetary and financial conditions.

The third tension gets to the heart of it: a tension between openness,
sovereignty and accountability—or democracy, to put it that way. As is
well recognised, and this really comes to a head in the Brexit discussions,
a degree of common rules and common standards are required for open
trade. The question is who sets those standards, to what extent those
standards can be tailored to local circumstances and to what extent the
focus can be on either exact equivalence—textual equivalence, to use a
European term—or equivalence of outcomes.

The point that I was trying to make is that, likely both in elements of the
US-China discussions and other trade discussions and in the components
of the Brexit discussions on financial services, which, truth be told, have
yet to truly have been had, there is the question of where on the
spectrum the relationship will land. If there is going to be an open
relationship—I am coming to a conclusion—where will it be based? Will it
be exact European-style equivalence, where the rules are the same and
there is joint, and in some cases dual, supervision of the relevant
entities, versus outcome-based equivalence? By the latter I mean that,
although there are a variety of different ways of describing this, there are
common international standards, whether set by the Basel committee,
the FSB and other bodies, there are local additions, and in most cases,
for very good reasons, there are enhancements taken here in the UK and
in Europe, although not always in the same manner or to the same
degree.

The sum of those measures plus judgment-based supervision yields
similar outcomes for financial stability, market integrity and investor
protection. If you reach those levels, you allow the free flow of financial
services. To go from the specific to the general, the point is that as these
negotiations proceed they will have a short-term impact on the global
economic outlook, but the nature of the future relationship in particular
has the potential to show some of the way towards future trade agreements, particularly—this is my final point of introduction—for the trade in services, which is likely to be the most important growth area in trade if globalisation is going to continue.

The Chairman: I read the speech as indicating that your preference was more towards being a rule-setter than being a rule-taker within an international context.

Dr Mark Carney: Yes, within the constraints of certain agreed minimum outcomes. Again, being careful to restrict it to the areas of which we have direct experience at the Bank—I guess I have personal experience as the former chair of the Financial Stability Board—in financial markets and the financial system there is quite a wide body of agreed international standards.

They are not international requirements but standards, and they are designed in such a way that most jurisdictions, most countries, will take those standards back and adapt them somewhat. They are minimum standards by definition if they are an agreement, and in many cases people will enhance them. We have higher requirements for the domestic, or so-called ring-fenced, bank elements of our financial system precisely because the UK has such a large and complex global financial system attached to it. Not everybody does that, but that is okay because that is an enhancement, and at a minimum it reaches above the international agreed norm.

Lord Kerr of Kinlochard: Governor, back in November the Bank published its assessment of different withdrawal scenarios for Brexit. Now that there are 24 days to go, the risk of a no-deal exit is probably greater than it was then. Then, you saw two scenarios: a “disruptive” scenario and a “disorderly” scenario, the main difference between them being that, in the latter case, we would inherit none of the EU’s existing trade agreements with third countries.

In the former case, you envisaged a hit of about 3% GDP; in the latter case about 8%. You saw inflation going up to over 4%, or up to 7.5% in the disorderly case. Do stand by the assessments you made then? Which seems to you the more likely of the two scenarios now—the disruptive or the disorderly?

Dr Mark Carney: Thanks for the question. To be clear—I know you know this, but I would like to read it into the record—these are scenarios, not forecasts. It is important to repeat why we did the scenarios, apart from the fact that we were asked to divulge them. The reason we do the scenarios is to test the system—certainly once one is using phrases such as “disruptive” and “disorderly”—against the worst-case scenario, so we can be assured that financial institutions will be in a position to withstand a shock like that, however unlikely.

In the case of the disorderly scenario, in effect everything goes wrong as detailed in the report, which you will have seen. It is not just a question of tariffs, although of course tariffs come into place, but standards are
not recognised, there is disruption at the ports, and there are material—I underscore “material”—increases in risk premia, credit spreads, so-called term premia and gilt. So the cost of longer-term borrowing goes up and there is heightened uncertainty, as sometimes happens in a shock; we would expect it to happen in a shock, but the degree to which it would happen is a question of judgment. Of course, it is not entirely independent. It is dependent on the extent to which something is a choice and managed, as opposed to something that is an accident and is fallen into, to extend the analogy.

That is context. The consequence of those scenarios is that, over the last two years, we have ensured that our banks have grown their capital and substantially increased their liquidity. We could go into the details of that, but it is in the order of fourfold in both cases relative to what they would have had a decade ago. So they are in a position to dampen the effect of these scenarios. Hopefully, we will have a chance to talk more about what that actually means, if you wish.

That is context and consequence. Now to what has developed in recent months. I should have started by saying that we stand by our scenarios. I reference the fact that the Financial Policy Committee came out today with its most recent set of decisions and judgments about the degree of preparedness, and it uses those scenarios to judge the preparedness of the core of the financial system: the banks.

Since we released those scenarios in November, there have been some constructive developments in preparedness. Some have been detailed over the last few weeks through parliamentary testimony. TSPs—temporary simplified procedures—have been put in place, plus an initial approach in the UK, which would reduce security and other checks at the border, in effect creating the prospect of roll-off behaviour at the border for a period of time. It is sequenced in terms of a period of time: six months for some, up to 15 months for others, which would help to reduce frictions at the border.

In addition, as you aware, the current count, which could change, is that six of the trade agreements have been rolled over. That is about 4% of UK trade, so it is something if not everything. There has been progress on the financial side: material progress in the derivative markets. Alongside the ECB and ultimately the Commission, with the Treasury’s help, there has been important progress on cleared derivatives, which has reduced some of the financial risk.

What I am about to say are all judgments. If you took the scenarios that we had for a no-deal Brexit—you referenced the disruptive and the disorderly scenarios—the judgment depends on what your counterfactual scenario is: what we are comparing them to. If we compare them, as we did in November, to our forecast of the economy at the time, which presumed something broadly consistent with the Prime Minister’s deal—not specifically the Prime Minister’s deal but an average outcome—the potential hit to GDP was just under 5% in the disruptive scenario and just under 8% in the disorderly scenario. One would add about two
percentage points on to that if one looked at an undisturbed—in our judgment—non-Brexit scenario with the underperformance of the economy relative to expectations prior to the referendum.

But let us stick with roughly 5% and 8%. The items I indicated earlier, given our modelling of the situation, would pull back somewhere between 2% and 3.5% of those losses depending on the scenario, because in a disorderly scenario, as you would expect, you get frictions at the border. Part of the consequence of that is heightened uncertainty, which has impacts on credit spreads and borrowing costs, and that has impacts on GDP. So you get a short-term impact on GDP and a financial market amplifier.

My point is that there has been progress in preparedness, which reduces—I emphasise “reduces”—the level of economic shock. Again, it is a matter of judgment. There is false precision in all these numbers.

I will finish with this and then hand back to you. To be absolutely clear, we still expect that there would be a material economic shock. Half of businesses are straight-up reporting to us that they are not prepared for a no-deal Brexit. We talk to thousands of businesses up and down the country. Of the half who say they are prepared, half of those say, “We are as prepared as we can be”.

The frictions at the border can be reduced from this side of the channel, but they are also a product of any frictions that emerge on the other side of the Channel. Eighty per cent of road haulage round trips are through Europe, and if they are hung up in Europe we have a good day coming in, but subsequently it plays back in.

So we see potential for material shock. What we can do about that is to make sure that the financial sector is there to help buffer it. As we emphasise today, and I will stop here, financial stability does not guarantee market stability or economic stability. It makes sure that the system functions and is not made worse, but we would still expect a material adjustment in these cases.

Q3 Lord Kerr of Kinlochard: Which of the two scenarios now seems more plausible? Perhaps we should drop the labels “disruptive” and “disorderly”, which may be a bit emotive. You say that, in both cases, remediation action since November has meant that the scale of the hit would be a bit lower than was seen then.

Which is the more likely scenario, given, as you just said, that the EU would apply the common external tariff from 30 March, so there would obviously be quite a serious hit to trade, and that the proportion of the EU’s external trade agreements that we would inherit successfully in a no deal at the end of this month is relatively low? Am I therefore right in thinking that the bigger of the two hits is the likelier, even though both of them will have gone down a bit since November?

Dr Mark Carney: I have a couple of comments. The first will seem an odd statement, but it is important to make it: it depends on the extent to
which we are in control of events. That is one of the considerations. It depends whether this is an accident or a conscious act—whether it is driven deliberately and clear steps are taken to mitigate and manage it. Falling into a no-deal scenario at the last second is more likely to be a disorderly event than a disruptive one, not least because very little weight is being put at present in financial markets on a no-deal, no-transition scenario. That could change, and quite quickly; as you will know better than I, there is a series of important political events in the coming weeks, and certainly there is a timetable.

I want to make another point of context. There is also a question about what Europe does in these scenarios. Let me give you a precise example from the financial sector. Our estimate is that at present for European banking entities, in the event that there is no withdrawal agreement, implementation period or transition period after 29 March, there are a series of “European businesses” that need to transfer from London-based entities to European-based entities. In every single case, that business—let us say it is a USIT, an asset manager or an insurance company in Europe that formally traded with a London-based institution but now has to trade with a European-based institution—a change of legal documentation needs to be made along with, associated with that, a series of IT systems that need to be put in place. It sounds relatively straightforward, except it is multiplied by tens of thousands and it all has to happen at the same time.

At present, somewhere between 10% and 20% of those relationships have transitioned, and we are a few weeks away. This is first and foremost an issue for Europe, because about half of the wholesale activity in Europe currently takes place with UK-based entities, and that is what would have to transfer overnight to Europe. Let us take the upper end and say that 20% of that documentation is ready. The substance of the point that I was making is that there will have to be a judgment by Europe in that scenario on whether to enforce the rules. That activity would therefore stop, which would have a consequence for Europe but—full disclosure—we think would have a consequence for UK markets, because while the disruption would be first and foremost in Europe, it would come back here.

**Lord Lamont of Lerwick:** Governor, I appreciate that of course you have to publish the worst possible case scenarios, but presumably you have published other ones besides disruptive and disorderly. You might like to list what they might be as well and what the outturn would be under those scenarios. Even on the disruptive and disorderly scenarios, over what period of time is the GDP loss?

**Dr Mark Carney:** We look at the GDP loss over a three-year horizon, which is the most policy-relevant horizon. I also want to make this point of context: if we are looking at the most difficult scenario, again to make sure the banks are ready for it, we have to make a judgment not just about the scale of the ultimate impact but about the timetable for that,
so in many respects we pull the adjustment forward. That is a judgment and we can relax that.

Let me get to the first part of your question by way of illustration. In the same document we published an analysis of a smooth transition to a WTO scenario. In those circumstances, one does not have border disruptions or the logistical issues that come into play, nor some of the financial sector rebounds. For order of magnitude, let me give you an apples-to-apples comparison. One can always pick the comparison, but I will pick relative to the forecast for the UK economy at that time, November 2018. In the disruptive scenario, just under 5%—

Lord Lamont of Lerwick: Over three years.

Dr Mark Carney: Over three years, yes. That is how much lower the level of GDP would be after three years. In the disorderly scenario the figure is just under 8%, but in a WTO scenario we are looking at somewhere between 2.5% and 5%. So there is a material improvement in the outcome if we are prepared.

Again, this is a big judgment. There is a series of judgments and there are ways to model and map this. We have disclosed it and people can play with our assumptions as they wish. Then there are fundamental economic judgments about which businesses become less economic because they export into Europe or they are part of European supply chains.

Lord Lamont of Lerwick: Did you model a situation in which tariffs, even in the event of no deal, might be zero on both sides?

Dr Mark Carney: There was no reason to model one that would be zero on both sides.

Lord Lamont of Lerwick: You could forecast what the economy, despite the psychology, was going to do. You could forecast it anyway.

Dr Mark Carney: You can forecast it, but I do not know why one would. I do not follow the logic of a zero-tariff WTO scenario.

Lord Lamont of Lerwick: If you are just making a fan chart of all the different scenarios under which Brexit might happen, even one that has some resemblance to the present situation might be one worth documenting.

Dr Mark Carney: I just do not see why Europe would not apply tariffs. I am sorry for stating the obvious, but the issue is that if Europe applies a zero tariff to the UK—call it 15% of Europe’s trade—it then has to apply a zero tariff to the rest of the world.

Lord Lamont of Lerwick: But under Article 24—

Dr Mark Carney: I am sorry, Lord Lamont, but that is certainly not my understanding of Article 24 of GATT. There is no rollover of the customs
union. One has to be in the process of adjusting the customs union, which in at least a common understanding of a no-deal scenario—maybe I am lacking imagination here—a no-deal scenario by definition is not a deal and therefore not a process. It is a process if there is a withdrawal agreement, an implementation period and an ongoing negotiation, which is what affords the ability to maintain, in effect, the status quo.

On the orders of magnitude of the tariff effects, and then the judgments about good standards, phytosanitary and passporting, I am happy to write in, but in my head the tariff effects are a fifth of that overall group of trade barrier impact that would come into effect.

While the passporting is material—it is about a percentage point of GDP—one can debate the broader ecosystem costs, such as what other activities become less effective. Again, the non-tariff barriers are between about one and one and a half percentage points, depending on what happens on broader services and on data, which is a big consideration that we have not tried to model. On the tariff side, the figures are also in that range.

So I can provide it, but I do not see this as a scenario. In the end, we were formally asked by the TSC—we can be formally asked by this Committee too I suppose—for a WTO-UK scenario.

Q4 Lord Sharkey: Governor, the forecasts in the Bank’s February inflation report suggested an interest rate rise of 0.25% over the next three years compared to the 0.75% rise that was expected in November 2018. Could you explain the reasons for the reduced pace of interest rate rises?

Dr Mark Carney: Yes. The first thing is that, for more than a decade, the convention for forecasts has been to use the market-implied path of interest rates. We take the market view of potential interest rates and use that in our forecasts. We also take the current spot rate of sterling commodity prices and other things as part of the forecast. What is revealed from that is where the economy goes and where inflation goes.

Two things have happened since the November report. The first and most important is that the global economy has slowed quite materially. To put a number on it, if you weight global activity by UK exports, it slowed by a little more than 0.5% over the next two years, which is quite a large shift. If you think of the global economy as UK-weighted—so Europe matters more to us than China in that scenario—it grows at about 2.5% on average. That is a big move in a three-month period. That had consequences for the global path of interest rates. In fact, for the largest economies, particularly the United States, the global path of interest rates fell by a greater extent than the UK path of interest rates did.

The second thing that happened, not entirely unrelatedly although amplified by Brexit uncertainty, was that the UK economy slowed. It slowed to 0.2% in Q4, and slowed into the first quarter of this year. As a consequence, a degree of slack is opening up in this economy. That means less domestic pressure on prices, and again would be consistent
with a reduced degree of interest-rate tightening. That is my first explanatory point.

My second explanatory point goes slightly the other way. In our forecast, inflation is above target throughout the horizon and remains above target at year 3. By the end of the forecast, which of course is presumed on some form of Brexit deal and a smooth transition to that, the economy is growing at 2%, above our estimate of trend; the economy is in excess demand, so it is more than in full employment and factories are running hot, if I can put it that way, and inflation is above target. In other words, the path of interest rates is not firm enough or quite high enough to be consistent with us fulfilling our mandate, which sends a broad signal about the stance of policy.

**Lord Sharkey:** What, if any, is the implication of the reduced rate of interest rate rises for the unwinding of QE?

**Dr Mark Carney:** If it were to come to pass, it would have some implications for the initiation. The committee’s current guidance is that we would not begin to consider unwinding QE until interest rates reached a threshold of 1.5%, because we want to continue to use Bank-rate interest rates as the marginal instrument of policy. A Bank rate at 1.5% gives us room to go through a full cycle of Bank rate in the event that the economy were to slow. If it takes longer for interest rates to get to that level and above, it would follow that it would take longer to begin the unwinding of QE.

**Lord Sharkey:** Does not that leave us vulnerable to any kind of financial crisis? For example, the OECD reports that corporate debt currently stands at around £13 trillion, more than half of which is in low-grade investment bonds. Of that, £4 trillion has to be repaid or refinanced within three years or so. There are, as you said yourself, deteriorations in the standard of lending in this country and elsewhere that echo the excesses of 2008.

Given what you have said about interest rates, and given the implications for QE as a weapon, what kind of danger does the overhang of corporate debt present to the British economy?

**Dr Mark Carney:** We think there are issues with corporate debt in the global economy. The locus of those concerns is, first and foremost, the United States, where the re-leveraging of the corporate sector has been most dramatic, where the underwriting standards have been most lax and where many of the exposures are concentrated. We have mapped—and I am happy to furnish it to the Committee if it would be of interest—the global exposures of corporate debt. In literally the top right corner of that mapping—so the least risky and the smallest exposure—is the UK banking sector. Most of the re-leveraging in the US, most of the deterioration in underwriting standards for US corporate debt, and many of the holdings in the US are in Asia and other jurisdictions like that.
The UK itself is less exposed to this phenomenon. But that does not mean that we could not become exposed to it, so the question and its motivation is very on point, and it is something with which the Financial Policy Committee and the PRC, the supervisory arm of the Bank, have been increasingly concerned. The consequence of that has been a heightened focus on underwriting standards in the UK, on balance sheet risk and on so-called warehousing or underwriting risk for corporate debt exposure to collateralised loan obligations. That is one issue on which the FPC is focused.

If I can make a general point, I think it is less fortunate than it is to the credit of this country that there is a recognition that monetary policy has limitations and cannot do everything. The Financial Policy Committee and the PRC were set up with clear responsibilities to address these pockets of risk as they develop, so their necks are on the line. I sit on these committees, so my neck is on the line either way. That is as opposed to us having to use interest rates to try to squash corporate debt at a time when the economy has slowed because of Brexit uncertainty. We think this is a temporary situation; it is understandable volatility in the data at a time of heightened uncertainty, and we think that things will come back. It would be particularly unfortunate—penny wise, pound foolish—if we were to raise interest rates to address corporate debt at a time when the economy was weak and inflation was under control.

Lord Tugendhat: Governor, you refer inter alia to the slowdown in the British economy. To what do you attribute the extraordinary buoyancy of tax receipts in January and the continued high level of employment? The figures seem to be sending different messages.

Dr Mark Carney: The labour market has consistently performed very strongly over the past five-plus years. A variety of factors have driven that. I will get to the shorter term in a moment, but the big picture is a combination of demographic changes and preferences, such as more women in the labour force and people working longer. Unfortunately, in some cases, people are having to work longer because of the debt overhang from the previous crisis and smaller pension pots than expected. Some of this has been due to benefit changes which have made the labour market more flexible but which have also brought more people into work and kept more people in work.

A consequence of all that is that there has been a big increase in supply of labour. As you are no doubt aware, more people are employed than ever before and the employment ratios are at all-time highs. It is not just that unemployment is low; people are working, not always in the jobs they want and not always with as many hours as they want.

Now I will get on to the short term. Increasingly, in the short term, the employment being created is full-time and both the quality of jobs and wages have begun to pick up. Real wages are now growing consistently for the first time in a long time. That is all to the good.
The core question in the very short term is: why has employment remained strong as the economy has slowed? We think that it is a product of two factors. First, companies have decided that for marginal expansion it is better to hire than to build. That is the flip-side of a very weak investment performance. Business investment is about 20 percentage points lower than the path it was on prior to the referendum. That is understandable because of uncertainty, but it is a big difference. Companies have hired, not built.

Secondly, employment in general is a lagging indicator of economic performance, so some of this may be the tail end of the strength of the economy earlier this year. Virtually without exception, the forward-looking employment indicators have deteriorated quite substantially over the past three months. Again, this is where I say, from an MPC perspective—we have made this point—that we expect short-term volatility in the data, so we are not putting undue weight on either the slowdown or the forward-looking indicators we are seeing in surveys because we think that they are both influenced heavily by debates in the Palace of Westminster.

Q6 Lord Lamont of Lerwick: Can I go back to the banking system? The stress tests you carried out in November 2018 were pretty positive; I think that one could be justified in using that word. The loss rates looked at were consistent with the global financial crisis. The major UK banks’ aggregate tier-one capital ratio after the stress would still be twice its level before the financial crisis. Is there any possibility that capital restrictions would have to be relaxed in a post-Brexit scenario?

Dr Mark Carney: The standard we have used is to ensure that if there were material shock the system would be in a position not just to survive it but to continue to meet credit demand. A system that gets down to just its minimum requirements would not continue to meet that demand.

Let us make this topical. In the current situation, there is a possibility of a no-deal, no-transition Brexit with at least a short-term hit to the banking sector. This is not the most likely scenario, but there is the possibility that my speech was wrong—or was right at the time but it turns out to be wrong because of other events—and we will see a global recession, possibly not entirely unrelated to an increase in financial costs through Brexit. We need a system that can withstand both of those potential shocks.

In the FPC report published today, we made a judgment based on both the Brexit stress test and the global one that the system has enough capital to withstand that shock, but, to be candid, it gets tight at that point. The combination of those scenarios gives us the sense that we have the capital about right for the system as a whole. To put it another way, I do not personally see a need to build capital further for the system as a whole. There will always be exceptions in terms of individual institutions.
I will hand back to you in a moment, but I want to make one other point about policy. One of the questions is: do we have the right mix in our capital stack between buffers—what can be drawn down and the minimum requirements? We have experience in reducing the so-called countercyclical capital buffer. We did it following the referendum. It releases capital and reduces requirements. If banks have otherwise strong capital, it puts them in a better position, on the front foot in lending.

As we get more experience of this, there are some arguments that when apportioning the capital—not changing the overall amount but changing how you mix it between buffers and minima—there may be some advantage for the system as a whole in putting in more buffers and lessening minima: swapping them round. We can certainly look at that whatever environment we are in.

Q7 **Lord Lamont of Lerwick:** Finally, can I ask you about clearing houses for derivatives in euros? It is well known that European supervisors have been seeking a more direct role. Of course, the possibility exists of compelling repatriation of such instruments to the eurozone, but your colleague, David Bailey, seems to have taken a rather different line. He suggested that the European authorities should defer to UK regulators over the supervision of clearing houses. What do you think about what he said?

**Dr Mark Carney:** I certainly associate myself with Mr Bailey’s comments. For the record, I mean David Bailey, although I think that the other Mr Bailey—Andrew Bailey—would agree with him.

In many respects, this goes back to where the Chair opened the discussion on the right way to organise—this is the classic example—big financial market infrastructure with economies that are, as I am sure you will appreciate, huge in scope and structure, with activity concentrated in a certain location. Of course, that are cross-border risks, so in this case the European authorities need to be satisfied that our standards are high enough.

In the supervisory relationship, co-operative arrangements and information sharing are desirable, but the ultimate backstop in the home authority is the taxpayer, after all. We are designing these things, so that is a conceptual, as opposed to an actual, point, but that is the reality: the home authority has the final word.

Q8 **Baroness Kingsmill:** Governor, could you give me a big-picture view? Do you think that we have reached the limits of globalisation? Do you think that the disruptions we are seeing in different markets suggest that deglobalisation is taking place?

**Dr Mark Carney:** The big picture is that an investment in the consequences of deglobalisation, whether for central banks, the organisation of supply chains or any other aspect of commerce and finance, is time well spent. There are those forces.
My second initials comment is that in order to recast or relaunch—different word, same thing—globalisation, a greater focus on the globalisation of appropriate services, with less focus on goods, is needed. A focus on the ability of small and medium-sized enterprises to trade across borders is also needed. On the latter point, the reality is that many trade agreements have focused principally, perhaps disproportionately, on benefits for multinationals. That misses out a big component of the economy. Moreover, a lot can be done in financial reform to lower dramatically cross-border financing costs for small and medium-sized enterprises.

Thirdly, a “small p” political point is that if you want greater buy-in for globalisation, a much broader spread of entities—both geographically and in terms of size—that are better connected to the global economy is likely to deliver that.

Baroness Kingsmill: There are other issues as well as trade and financial stability, such as climate change and the huge immigration sweeps from south to north—that sort of thing. Those factors also impact on globalisation, do they not?

Dr Mark Carney: I will not touch on migration; I will touch on the former, on climate change, because that touches on some of our responsibilities.

As you know, we oversee the reinsurance sector, which is the fourth largest in the world and, arguably, the most sophisticated reinsurance is Lloyd’s. In reinsurance, climate change is one of the biggest issues, or at least one of the top three that they have to manage. They are very good at it, but it is a constant dynamic. Those learnings, or realities, are starting to move into the core of finance. We have found that over three-quarters of UK-based banks, responsible for £11 trillion of assets between them, view climate change as a financial risk now. Even though their horizons are much shorter than insurance companies’, this has moved from, say, corporate social responsibility and reputational risk to an actual financial risk that they are managing accordingly.

The consequence of those two building blocks is that we have worked, as you may know, on better supervision and risk management in those sectors—obviously because that comes with the core responsibilities—but also on better disclosure more broadly within the corporate sector in order that the transition to a lower-carbon economy can be as smooth and efficient as possible. Now there is £100 trillion of assets globally behind that disclosure. It sounds like a big number and it is; it is 50% larger than global GDP.

So on your globalisation point, to tell a positive story, you have the financial sector starting to see a risk that could undercut faith in globalisation or global solutions as these issues start to become relevant. Finance does what it does best, which is to anticipate the future and start to react to it, so it can be more of a part of the solution.
The Chairman: Did you want to follow on the RPI point?

Baroness Kingsmill: No, thank you.

Lord Turnbull: You have spoken in the past about stranded assets, which I think is a warning to investors who invest in assets of fossil fuels. I am puzzled by this. The history of capitalism is littered with innovations coming along and leaving assets stranded—railways, canals, telephone exchanges and, you could say, half our high streets. I cannot see why investing in an oil refinery is any different from any of the other stranded assets that litter our past economic history.

Dr Mark Carney: It is a judgment. You make a market, whether it is an oil refinery, a coal plant, nuclear facility or any form of energy for energy-intensive process or good, and it is a judgment about the point at which, if any, there is a transition to a lower-carbon economy associated with either price or non-price restrictions. Where is the tipping point at which what was economical becomes uneconomical?

On stranded assets, let us make this tangible. The market gets it right and the market gets it wrong, on both sides of the equation. It looks as if the market just got it wrong on European diesel auto; there is a huge amount of value destruction there, and it is actually one of the issues that has caused the European slowdown that is reverberating back on this economy. The same thing applies to US coal, German utilities and coastal real estate.

Now, there is a series of other judgments to be made. It is debatable whether, if I own a clean coal plant in the US, I will see it out to the end of its economic life. I am making a judgment on the carbon policy in the United States for the next 10 to 15 years. If I invest in the oil sands in my native Canada, I am making a judgment on a series of environmental standards in Canada and in other jurisdictions.

The point is that there should be enough information to make those judgments and then fully recognise that well-informed people and institutions with highly intelligent people will take different sides on those calculations. Some people will have the view that this is not that big an issue, so it is fine to invest in something that is relatively carbon-intensive and it will not become stranded. Others will have the view that it is the most important issue and changes are coming. Some will have faith in their Government’s actions and others will not. Some will believe that disruptive technologies will come in and others will not. That is what makes a market. The point is to have the information on that.

On the point about stranded assets, depending on what weight one puts on climate science, there are judgments that you can make. The carbon intensity of certain hydrocarbons, if they are all harvested and produced, has consequences for a 1-degree, 2-degree, 3-degree or 4-degree world. There is a broad-brush inconsistency between monetising all those assets, producing all those assets and achieving climate goals. That inconsistency may fall on the side of the climate goals not being
achieved, along with the economics of that, but I do not see that as a puzzle—it is a judgment.

**Lord Turnbull:** I can understand that the risk of stranded assets exists in the energy sector. What I do not understand is why the situation is different from the march of other technologies. People have built housing estates in Ireland that have never been occupied; they are stranded assets. Huge department stores all over Britain are closing; they are stranded assets. Banks have to make decisions on the basis of risk, as they have always done. It is the highlighting of one sector as being peculiarly prone to this particular problem—

**Dr Mark Carney:** I entirely disagree. I do not think we highlight one sector; I can assure you that we spend our time on—

**Lord Turnbull:** You seem to talk about stranded assets in the energy sector.

**Dr Mark Carney:** I tell you what, why do you not do a word search of all the public utterances I have made—do a word cloud—and see how many times “stranded assets” come up?

**Lord Turnbull:** Unconnected to energy?

**Dr Mark Carney:** We are debating terminology. It is known terminology. Of course the disruption of the shift to online has an analogous impact on the high street, but I do not really understand—

**Lord Turnbull:** I think you should be warning about stranded assets in general, rather than the emphasis being on the impact in one particular sector.

**Dr Mark Carney:** I am slightly mystified by your line of questioning, to be honest. We look at a range of exposures, obviously, and we look to see whether business strategies are resilient to structural changes in a series of industries. It is the case that certain exposures have not been clocked, historically. Cyber risk is an example. Five years ago we did not talk about the operational risks of cyber; it is a new risk. I could say that it is a conventional risk, but I do not think that would give the precision or the focus of the institutions in order to do it. I would not say either that there is some witch-hunt on stranded assets. The points are twofold on the transition to a lower-carbon economy; whether that will happen is an open question, and we should recognise that.

The first is that a considerable amount of hydrocarbons will be burned between now and the transition to a 2-degree, 2.5 degree or 3-degree world. Actually, part of the judgment on the investment side will be: which ones, in which jurisdictions, and why? That is a judgment to make. It is unlikely that they will all be burned. I will not give examples of specific jurisdictions, but you can probably draw them.

The second question is whether specific regulatory elements will be put in place. The list is growing of where there is disruptive regulatory change
that has material exposure. For the financial institutions that we supervise, which are responsible for safety and soundness, we would want to know that they have thought about this. Everyone on the insurance side does, and the best of the banks do.

Q10 Lord Burns: Governor, when you were here a year or so ago, we had a discussion about problems with the RPI and how we might deal with some of those problems.

Since then, we have taken quite a lot of evidence on this, and of course published a report. The Committee would be very interested to know the extent to which you agree or disagree with the report and the Committee’s suggestion that we need to resuscitate the RPI, relative to the condition that it seems to have reached, to try to deal with some of its problems and, in time, move to a single reliable measure of inflation.

We raised a number of individual points, but maybe we could begin with the general issue.

Dr Mark Carney: First, I very much welcome the report and the work that went into it. It is another example of this Committee’s service. It is an important issue that was in some danger of becoming intractable. I forget your exact terminology, Chair, but I think it was about a “ridiculous dance” or words to that effect.

The Chairman: I am much less diplomatic than you imply.

Dr Mark Carney: That is how it was translated. The nettle does need to be grasped and, although it is for others to decide, I suspect the report will make that happen.

The question then becomes a practical matter of what gets done; there are decisions for others. The move to a single or preferred measure of consumer prices is highly desirable. The path by which we get to that remains to be determined. Transition is important, but transition with a sense of the end objective. As you are well aware, there is a huge range of stakeholders in this. It starts with the gilt-holders of RPI-indexed bonds but extends to pension-holders, both indexed RPI and increasingly CPI, and to those on either side of PFI contracts indexed to RPI and of course student loans indexed to RPI.

I want to say one other thing by way of introduction. Given our mandate and remit, it will not surprise you to hear that we have a particular interest in CPI and the role of CPI. We will of course target whatever Parliament decides we should, but we think CPI serves us well. We think that the ONS’s development of CPIH in the current iteration is promising; its track record is lengthening and it bears consideration with respect to the final determination.

Lord Burns: I have two supplementary questions. First, on the measure of housing costs, do you have a view on which will be the best direction to take?

Secondly, we had quite a lot of disagreement among our witnesses, and
indeed with the Committee, about the question of whether the Government should be issuing CPI-linked gilts. There was one view that this could lead to market fragmentation and could be disadvantageous, whereas the Committee’s view was that we should be moving in this direction. If this is where the overall preference is going to develop for a single measure of inflation, why would we continue with RPI-linked gilts?

**Dr Mark Carney:** I will focus on the core issues. We favour the rental equivalent approach for housing used in CPIH. Consistent with everything else in the CPI, it is about trying to measure our consumption of housing and not conflating it with other costs associated with housing prices and housing transactions. That means not having housing transaction costs or directly mortgage interest payments in there. Those are two examples.

So we like the approach in CPIH. As I said a moment ago, we think that it is tracking well from what we can see, with respect to rental equivalence and other cross-checks. In addition, the ONS’s broader powers—”broader information set” is probably a better way to put it—following the 2016 reforms adds further credibility to that.

It probably needs a bit more of a track record and a bit more study—one would hope there would be a broader study before moving to the next phase of adjustment—to confirm the appropriateness of that measure. But it is the most promising option in my personal view and, more importantly, from the perspective of the experts in the Bank of England.

One of the big issues is whether the Government should issue CPI-linked debt. There are a few considerations here. My perspective is that the thinking is about starting a new market rather than fragmenting an existing one. So are the conditions in place for starting a new market for CPI-linked debt?

First, there is natural demand for the product. Going back more than five years, the estimate is of somewhere between £250 billion and £400 billion in CPI-indexed pensions. Obviously there is a natural macroeconomic interest, since it is the variable we target and it is the most prominent measure of inflation. While there is a very small CPI-indexed inflation swaps market at present, one would expect that to develop pretty substantially with the underlying cash flow. There has also been private issuance; we have seen that over the course of the last couple of years of CPI-indexed debt.

All the signs that a market can develop are there. We should not put the cart before the horse, and I know that you are not suggesting that, but if a decision were taken to move to CPI indexing and that RPI would become a legacy and eventually a distant memory, then in the fullness of time, after a reasonable transition, the demand will absolutely be there, in my judgment, and that market will develop.

**The Chairman:** There was one issue about RPI that we found a bit puzzling—you have seen the Committee’s report. While RPI continues to exist as a measure, we could not understand why the statisticians were
not prepared to update it and make it relevant. Do you have a view on that?

**Dr Mark Carney:** That is best answered by the statisticians.

**The Chairman:** Yes, but I am trying to put some pressure on them.

**Dr Mark Carney:** To be absolutely clear, the UKSA and the ONS are committed to the highest quality statistics, as you know. They have taken that position; they have signalled delisting it as a national statistic, calling it a legacy statistic, and drawing attention to its deficiencies.

I apologise, but to go back to your “ridiculous dance”, they are in a situation where they cannot change it. They can recommend changes to it, but we have a formal responsibility, as you know, to judge whether there would be a detriment to specific bond-holders and to give that advice to the Chancellor, who would then make the decision.

The chicken and egg-type situation is that, if they recommended something that were to improve the measurement errors—as your report and the evidence you have received indicates, the tracking error relative to CPI is somewhere between 70 and 100 basis points, and fixing the Carli formula gets you most of the way there—those orders of magnitude mean that it is hard to image with a long-dated bond that that is not at least detrimental to those bond holders; but that is not a formal judgment. In which case, that is a very tough decision for a former Chancellor who has just left the building, and it is probably what the current Chancellor might do if we were having this conversation. It is a difficult decision. My suspicion is that the issue gets deferred, because one can anticipate the answer at a given time.

This Committee has done a very thoughtful and comprehensive analysis of the situation. It has brought the facts together and, in effect, posed the question. The ball is in the court of the relevant authorities. I have every reason to believe that your analysis and challenge is being given all the seriousness it deserves.

If things were to proceed, the big question would be to decide an appropriate end state. To do that, there would need to be a consultation and serious thought given to a form of transition. Those are complex issues that really have to be dealt with in an open and public manner, I would think.

**Q11 Baroness Bowles of Berkhamsted:** I want to seek some light relief by moving to a different subject. I have a few questions.

First, last week, there was a report in the *Financial Times* that Edward Bramson had used a loan from Bank of America to buy a 5.5% stake in Barclay’s. How does that kind of activity fit into the large exposures regime that banks have for exposure to one another? Is the situation any more serious if it concerns the equity of the bank itself? If a person acquires a position on the board through such a manoeuvre, would it be appropriate to consider whether that manoeuvre influenced any decision
as to whether they were a fit and proper person to be on the board?

*Dr Mark Carney:* That is one perspective on light relief—I was hoping for something a little lighter.

On the large exposure limit, I am slightly reticent to get too deeply into this or to prejudge what is still a hypothetical. There is an effort to get on a board; the effort has to be successful and then a judgment has to be made. I should not prejudge any of those steps. Obviously, there are considerations on large exposure limits. You will be familiar with the structure by which the caller arrangement means that the actual economic exposure is considerably less. So the exposure to the underline is less, but it has to be taken into account.

Again, I will not go into the specifics, but the appropriate supervisor would make the judgment depending on the booking entity that extended the loan; in other words, whether it was a UK subsidiary or one of the global ones.

*Q12 Baroness Bowles of Berkhamsted:* My second bit of light relief concerns whether you have done any work on the tax modelling consequences of IFRS 15, which concerns revenue recognition in contracts. It seems that, certainly in some instances, it forces revenue that would have been current into the future, with a consequent tax rebate, but it also deprives relevant institutions of capital by the amount that has been moved. Does any of this hit on banks? It hits on stock exchanges, but I can see the potential for quite a wide hit where there are lots of software contracts and various other things.

*Dr Mark Carney:* There is potential there, as you say. To my knowledge, it is not material, but I am happy to write to the Committee on that. I would rather give a proper answer, but, more from omission, I do not believe it is material. But I will run it down.

*Baroness Bowles of Berkhamsted:* I was wondering whether it was material to the Exchequer as well. I probably ought to declare my interest as a director of the London Stock Exchange. But we have coped with that.

*Dr Mark Carney:* It would have to be material from the bank channel to the bank first for it to be material to the Exchequer.

*Q13 Baroness Bowles of Berkhamsted:* One final thing; it is more of a comment than a question. I want to go back to where we started the discussions on Brexit. What on earth makes you think that the EU would adopt a judgment-based supervisory relationship, when it cannot manage to do it internally within the EU?

*Dr Mark Carney:* The question is the extent to which the EU would be willing, in certain wholesale activities, to recognise a judgment-based supervisory relationship for the purposes of maintaining an integrated market.

In the case of EU derivative markets, with which I know you are intimately familiar, to put it bluntly the raw economics of location policy
do not work, given the economies of scale and scope in other derivatives. We will not switch our supervisory model for UK-based financial market infrastructure to perfectly map to the EU approach. There is a trade-off between the tens of billions of euros of costs that will be borne by European pension funds and insurance companies, and ultimately the real economy, and coming to a co-operative arrangement.

Baroness Bowles of Berkhamsted: But it will wait until it can see the hit, as it has done with clearing. It will be the same for everything else: only when it sees that it may be losing out will it come to an arrangement.

Dr Mark Carney: As part of the process of preparing for both a withdrawal agreement and any possibility of no deal, our discussions with our European counterparts, whether it is the EBA, the national competent authorities, or ESMA in the case of some aspects of clearing—most of that is with the FCA, but some of it was with us, as you know—have been, as you would expect, very professional and constructive. We are making good progress on MoUs. That is not the entirety of the answer, but it is a foundation for these types of relationships to develop.

To state the obvious, there needs to be a political agreement on top of that for the future relationship. It will be the subject of negotiation and judgment on both sides—assuming an agreement is developed over time—as to which wholesale activities this suits. My personal view, which you know well, is that there are aspects of clearing which it absolutely suits because of the trade-offs I have discussed. There are aspects of wholesale banking which it should suit as well, but that remains to be tested.

Lord Tugendhat: Governor, as you know, there has been a big fall-off in international investor confidence in UK infrastructure over the past few months and perhaps the past year. Brexit uncertainties no doubt play a part, but to what extent do you think this is attributable to regulatory actions? Under some government pressure, the regulator is clamping down on utilities’ abilities to raise prices, and things of that sort.

Dr Mark Carney: I am not going to give you a complete answer in terms of a comprehensive view of the situation. In the very short term, there is an element of Brexit uncertainty that is dictating a reluctance in infrastructure, and to some extent in commercial real estate more broadly. With the resolution of some of that uncertainty, we would expect a re-pricing of those assets—I cannot say in which direction, because it depends on the form of that resolution—and renewed interest, given the underlying strengths here.

In any jurisdiction, threatened or substantial changes to the regulatory framework can have this impact, which is why these changes need to be deliberate and well thought through, and why the considerations of past investors, although not the only consideration, need to be taken into account.
If I may, I will link this to one other aspect while I have a chance. I mentioned the scale of some of the PFI contracts linked to RPI. That is also a consideration for the adjustment here; it needs to be carefully thought through if there is to be an adjustment to the economics of this, the horizon over which that would happen and the transition for this to happen.

To bring that together, in the short term, my limited, not comprehensive, exposure to this has suggested that it is more Brexit-related than regime shift in the investment environment here.

The Chairman: We are running out of time, so we will give Lord Kerr the last word.

Lord Kerr of Kinlochard: Splendid. Can I ask you one more question about Brexit?

Dr Mark Carney: You should.

Lord Kerr of Kinlochard: Supposing that we are still in a no-deal scenario but it is not no deal on 29 March—supposing there is a delayed no deal in, say, May or June. How would that change your scenarios?

Dr Mark Carney: It would be a product of what further progress could be made on the critical infrastructure projects—border and other infrastructure projects—that are under way. By the Government’s own account, two-thirds of those critical initiatives have made substantial progress, but by simple maths one-third of them still need to make progress. HMRC testimony earlier today suggested similar orders of magnitude of material.

One of the bigger challenges is business preparedness. What is difficult—you will all see this in your discussions with business; we see this every day—is that they do not know what they are preparing for. So if there is a period that is analogous to the last 90 days that we have just lived through—maybe there will be a deal, maybe there will not; maybe it will get extended, maybe it will not—that will just be an incentive to do nothing, I am afraid, because there is such a wide range of measures that businesses could take. We will probably be in another situation like today where only 46,000 of the 240,000 small businesses that trade in Europe are prepared. As has already been mentioned, half the businesses are not prepared, because they do not know what they are preparing for.

To be clear, there is a big difference between transition and waiting to find out where you are headed—transition is knowing where you are headed; waiting to find out where you are headed is not transition, it is just heightened uncertainty. So the question is how the time is used. If we know how the time is going to be used, it could make a material difference, yes.

Lord Kerr of Kinlochard: But the uncertainty is more about our action than about the EU’s action, because it has published what it is going to do. We know that it will impose the common external tariff on our goods
whenever no deal happens. The problem is the uncertainty on our side, because our Government are not clear what they are going to do. We do not know what our external tariffs are going to be. Is that right?

**Dr Mark Carney:** It is the case, as we meet today, that we do not know the tariff schedule.

**Q16 Lord Burns:** Shifting from Lord Kerr’s questions about no-deal scenarios to one about the circumstances if the Prime Minister’s deal, as you described it earlier, were to go through, do I take it that the profile for activity, inflation and interest rates in the latest *Inflation Report* is broadly consistent with the Prime Minister’s deal being completed quite soon?

**Dr Mark Carney:** Yes. The core assumption is that there is a deal—not specifically the Prime Minister’s deal, just an average of a range of outcomes. In that scenario, we see a gradual reduction of uncertainty. It does not end overnight, because, as we know, the withdrawal agreement is more about leaving and less about what the end state is going to be. But then investment picks up and growth moves from sub 1%, where it is now, to 2% within a couple of years, wages pick up, business investment picks up quite sharply, and inflation gradually increases, as per the earlier discussion.

It depends on how you interpret the political declaration. There is a very wide range of interpretations of the political declaration, but certainly on some interpretations the Prime Minister’s deal is better than the average that we use for the forecast. But that remains to be specified.

**The Chairman:** On that note, Dr Carney, I thank you very much on behalf of the Committee. We really appreciate the time and very much appreciate your complimentary remarks about our report on RPI, which you encouraged us to look at. I can tell you that for a couple of months we did not thank you for that, but we enjoyed doing it.